REMARKS

Claims 1 through 18 are in the application and are presented for consideration. By this amendment, Applicant has amended each of the independent claims. Further, several claims have been amended to improve the form of the claims.

Claims 2-4, 7, 12-14 and 17 have been rejected as being indefinite. Applicant has revised the claims paying close attention to the Examiner's comments. Applicant wishes to thank the Examiner for the helpful comments and for the careful reading of the claims.

Claims 1-18 have been rejected as being obvious based on the teachings of Warner et al. (U.S. 6,255,650) in view of Ronzani et al. (U.S. 6,421,031).

The rejection is based on the position that the references together suggest the combination of features claimed. Applicant respectfully requests reconsideration, particularly in view of the amended claims which clarify the combination according to the invention.

The Warner et al. reference is primarily involved in imaging (providing a display showing image information and providing high contrast visual image enhancement methods) based on a signal from an infrared camera. The purpose of this is to provide a fire fighter or other person with information as to the temperature of various features. An important aspect of the imaging is to provide color coding which present information to the user as to the various temperatures being encountered. For example, temperatures above 600° C (extremely hot for humans) are presented in shades of red with intermediate temperature ranges between 100° C and 600° C presented with shades of gray and then other items below 100° C being presented in shades of blue. This is discussed for example at column 8, lines 53-67. At

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column 9 (see for example lines 19-21) it is noted that the signal can be presented to another display monitor. Primarily, Warner et al. discloses receiving the IR image and presenting the display all in one single unit, for example for use by a fire fighter.

The Ronzani et al. reference is also involved in display systems. However, an important aspect of the Ronzani system (for example with reference to Figure 37) is the provision of a portable computer (a computer which moves with portable display). A system is described which is particularly for fire fighters wherein there is a head mounted fire fighting computer 710a as well as a storage module 714 that includes building schematics for the building where the fire fighter is located. A fire truck 77a may be equipped with a distributed data storage system 775a for storing maps and building schematics etc. In addition a communication modules may include a global positioning satellite sensor or other position sensor for accurately determining the position of the fire fighter. This information is combined with the building schematics to provide the fire fighter and the truck 77a with the fire fighters' position with reference to the building.

These references together fail to provide any teaching or suggestion which would direct the person of ordinary skill in the art toward the invention. Ronzani presents interesting features using a display and using data and processing. However, the reference provides no teaching and no suggestion of using building topography data and received image data and evaluating this for determining an instantaneous position. It is important to note that in Ronzani et al. the GPS data provides the position information. The stored maps and schematics are used to show this position relative to the map or relative to the schematic.

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Although this presents a linkage between a GPS and a map this does not provide information as to position based on pattern recognition using for example Real Time data (the fire fighter's image data) and stored building topography data. With the invention, the position is determined by a comparison between the image data and the topography data with pattern recognition providing the location. Clearly Ronzani et al. directs a person of ordinary skill in the art to a very different approach. Specifically, GPS data is provided and this GPS data is applied to a map such that the GPS data is given context, namely the known location is linked to a map. How this is done is not explained. Ronzani et al. fails to teach and fails to suggest determining a location based on the use of image data and stored topography data with pattern recognition being the means by which the users attain the knowledge of the location.

Considering again the Warner et al. reference, it must be kept in mind that Warner et al. directs a person of ordinary skill in the art toward improvements in the use of infrared signals, particularly with regard to how this is displayed to the user. The infrared signal is presented to the user by coding the different temperature information to provide the user with a visual display of temperature information. This provides no suggestion with regard to using image information and using stored topography information to realize the location of the user based on pattern recognition comparing the real image signal with the stored topography data.

In reviewing the teachings with regard to the obviousness rejection, several portions of the reference were noted of interest. With regard to Warner, reference was made to column 6, lines 39-47 with regard to receiving the IR signal and conditioning this or otherwise treating this. Column 6, lines 39-47 talk about the physical positioning of various structures of the

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Warner et al. device. In this regard, Warner et al. is concerned with the ergonomics including weight and other issues for a fire fighter or similar user. The cited section also deals with the mounting of sensitive equipment and the dissipation of heat from the various electronics. This does not present any teaching or suggestion of providing the structure as claimed and providing the process as claimed. Column 8, lines 53-67 is referred to and this talks about the color coding, an important aspect of Warner et al.'s teachings. Warner et al. presents information to the person of ordinary skill in the art with regard to receiving IR signals and how to present these to a user to pass on information readily. Again, this presents no suggestion to provide the combination of features as claimed. Columns 10 through 12 detail practical aspects of Warner et al.'s system using an IR camera unit and presenting a display. The display features do not deal with location and particularly do not deal with pattern recognition based on stored topography information and the received real time image. Indeed, Warner et al. directs the person of ordinary skill in the art away from the invention and directs a person of ordinary skill in the art toward a very different problem, namely increasing the usefulness of an IR image signal via a display and coding of temperature information.

The rejection states that Warner discloses storing image data relating to the building topography with zone identification as seen by the fire fighter in a storage medium such as a memory buffer 22. Here reference is made to column 8, lines 53-67. However, this section discusses the particular ability to show low temperatures which could be for example human beings in shades of blue with the blue being associated with "safe" target temperatures. This discussion continues through line 67 which talks about alternatives to show target
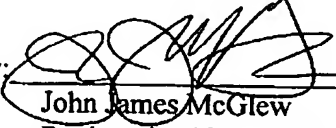
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temperatures. There is no support in this section for the position that Warner discloses anything with regard to data related to building topographies or use with this for pattern recognition in conjunction with image data. As such, it is absolutely correct that Warner is silent with regard to the claim limitation of means for determining the instantaneous position. Warner is not about this and in fact there is no suggestion to use topography information for any instantaneous positioning considerations. Particularly, Applicant does not understand any reference to Warner providing discussions of building topography in conjunction with issues presented in the present claims.

The rejection is clearly not supported by the references with regard to the statement that Ronzani discloses the claim limitation of "means for determining an instantaneous position of the device user by evaluating the image signals sent by image recording means by pattern recognition." It is absolutely clear that Ronzani provides instantaneous position information based on GPS alone. It is true that the information as to position (from GPS) is then used referencing stored maps and building schematics. However, this has nothing to do with pattern recognition and indeed does not specifically deal with any image signal evaluation for position determination. It is true that Ronzani speaks of building maps and schematics whereby a user of the computer and display according to Ronzani would be able to review such building information and schematics. It is notable that there is no suggestion to prepare those building schematics or maps in advance to link the building schematics and maps to GPS. It is true that GPS can provide information as to the position of a GPS sensor. However, there can be issues with regard to the operation of satellite elements within a building (in the center of a large

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building GPS may not properly present location information). As there is no discussion of establishing GPS locations on building schematics in advance, for correlation, it is not clear what is being discussed at column 18, lines 50-55. This discusses the use of building schematics by a CPU with GPS information to provide an exact position in the building. This may well suggest to the person of ordinary skill in the art of noting GPS locations on building schematics for a later correlation with actual GPS information. Although this is not stated, this may be a reasonable inference. However, this presents no information and no direction or teaching with regard to what is stated in the rejection (there is nothing with regard to determining position by evaluating signals sent by the image recording means by pattern recognition). It can be clearly stated that Ronzani does not teach the feature for which it is cited. Further, at best, Ronzani teaches establishing schematics of buildings and storing GPS information for later correlating real GPS information to the schematics. Although it can also be argued that this is not at all suggested (they simply disclose using GPS information) and then trying to correlate this with building schematics (e.g. trying to determine what floor a fire fighter is on by elevation information and determine where in the building the fire fighter is based on longitudinal and latitude information) the teaching certainly does not have anything to do with pattern recognition and real image to topography data correlation for determining a position of a user.

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As the references do not suggest the subject matter of any of the independent claims,

it is respectfully requested that the rejections be reconsidered. Further and favorable action on

the merits is requested.

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